



Salem and Hope Creek Annual Assessment Meeting

Reactor Oversight Process
2004 Assessment



Nuclear Regulatory Commission - Region I
King of Prussia, PA
June 8, 2005



Agenda

- ☐ Opening Remarks
- ☐ NRC Presentation
 - ROP Overview
 - National Summary of Plant Performance
 - Salem and Hope Creek Performance Results
- ☐ PSEG Presentation
 - Response to Performance Results
 - Update on Progress to Improve Work Environment
- ☐ Closing Remarks
- ☐ Break
- ☐ NRC Available to Address Questions



NRC Representatives

- ☐ S. Collins, Regional Administrator, Region I
- ☐ A. Randolph Blough, Director, Division of Reactor Safety
- ☐ M. Gamberoni, Deputy Director, Division of Reactor Projects
- ☐ E. Cobey, Chief, Projects Branch 3
- ☐ M. Gray, Senior Resident Inspector, Hope Creek
- ☐ M. Ferdas, Resident Inspector, Hope Creek
- ☐ D. Orr, Senior Resident Inspector, Salem
- ☐ G. Malone, Resident Inspector, Salem
- ☐ S. Bailey, Salem Project Manager, NRR
- ☐ D. Collins, Hope Creek Project Manager, NRR
- ☐ J. Persensky, Senior Human Factors Specialist, RES
- ☐ A. Kock, Assistant Agency Allegations Advisor, OE



Purpose of Today's Meeting

- ☐ Provide a public forum for discussion of the Salem and Hope Creek stations' performance
- ☐ NRC will address Salem and Hope Creek performance as discussed in the annual assessment letters
- ☐ PSEG will respond to the annual assessment and provide the NRC an update on their actions to improve performance in the following areas:
 - Safety conscious work environment;
 - Problem identification and resolution;
 - Procedure adherence and other elements of human performance; and
 - Quality of engineering products particularly as they relate to evaluation of degraded equipment and associated operational decision making.

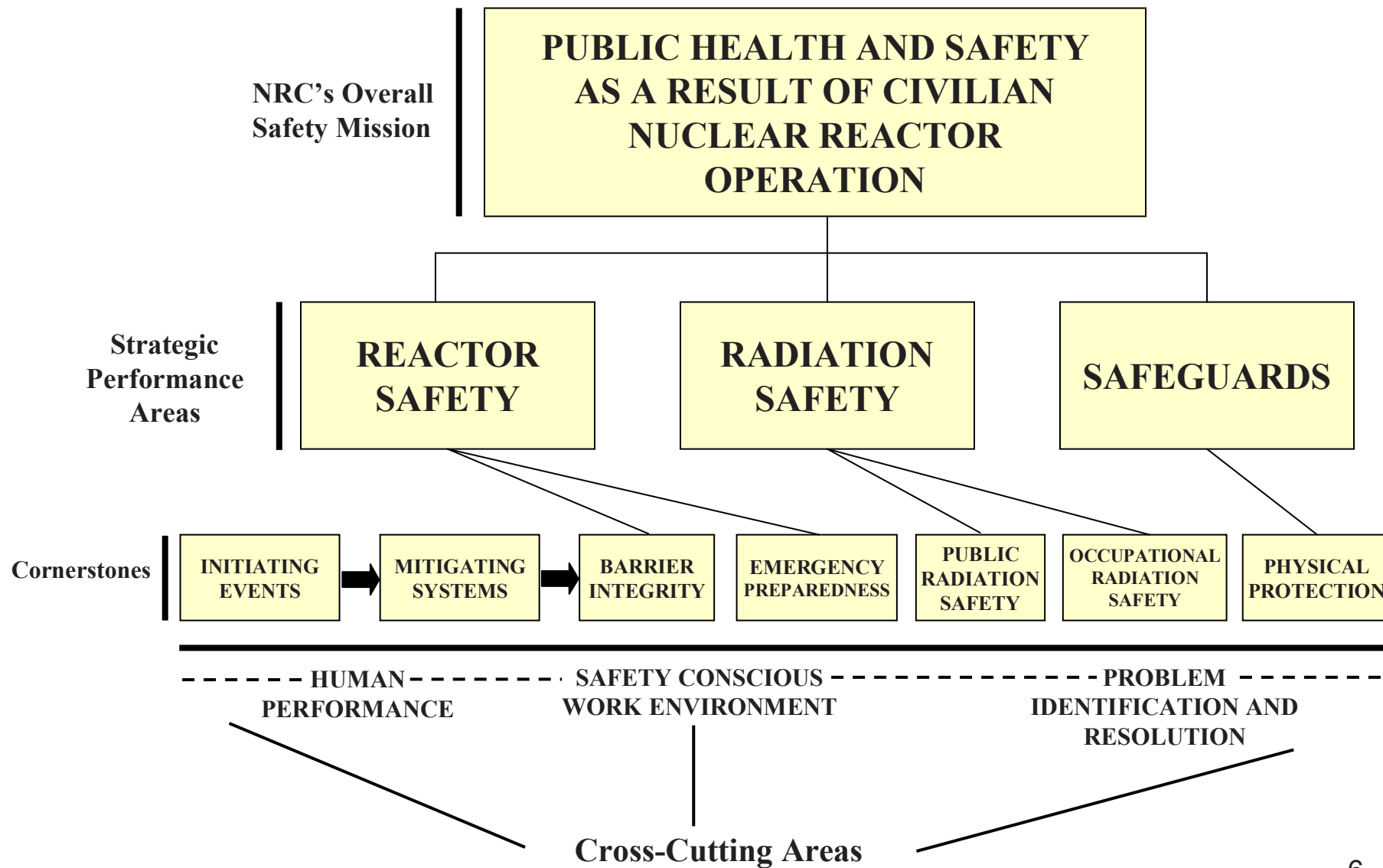


NRC Performance Goals

- ☐ Safety: Ensure protection of public health and safety and the environment
- ☐ Security: Ensure the secure use and management of radioactive materials
- ☐ Openness: Ensure openness in our regulatory process
- ☐ Effectiveness: Ensure that NRC actions are effective, efficient, realistic, and timely
- ☐ Management: Ensure excellence in agency management to carry out the NRC's strategic objective

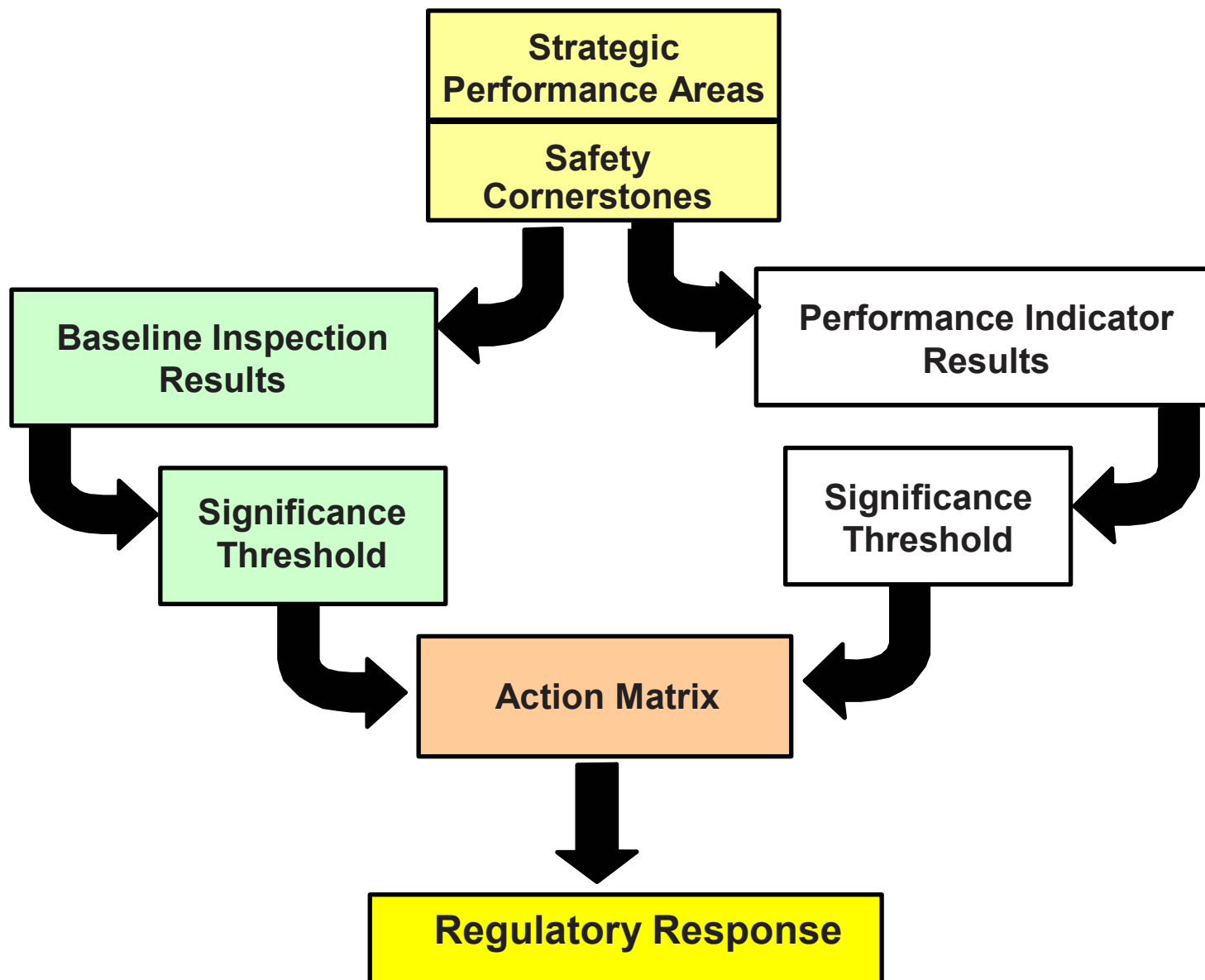


Regulatory Framework





Reactor Oversight Process





Examples of Baseline Inspections



| | |
|------------------------------------------------------|----------------------|
| <input type="checkbox"/> Equipment Alignment | ~92 hrs/yr |
| <input type="checkbox"/> Triennial Fire Protection | ~200 hrs every 3 yrs |
| <input type="checkbox"/> Operator Response | ~125 hrs/yr |
| <input type="checkbox"/> Emergency Preparedness | ~80 hrs/yr |
| <input type="checkbox"/> Rad Release Controls | ~100 hrs every 2 yrs |
| <input type="checkbox"/> Worker Radiation Protection | ~100 hrs/yr |
| <input type="checkbox"/> Corrective Action Program | ~250 hrs every 2 yrs |
| <input type="checkbox"/> Corrective Action Reviews | ~60 hrs/yr |
| <input type="checkbox"/> Safety System Design | ~420 hrs every 2 yrs |



Significance Threshold

Performance Indicators

| | |
|----------------|-----------------------------|
| Green: | Only Baseline Inspection |
| White: | May increase NRC oversight |
| Yellow: | Requires more NRC oversight |
| Red: | Requires more NRC oversight |

Inspection Findings

| | |
|----------------|------------------------------|
| Green: | Very low safety issue |
| White: | Low to moderate safety issue |
| Yellow: | Substantial safety issue |
| Red: | High safety issue |



NRC Response Plan or "Action Matrix"

| Licensee Response | Regulatory Response | Degraded Cornerstone | Multiple/Rep. Degraded Cornerstone | Unacceptable Performance |
|-------------------|---------------------|----------------------|------------------------------------|--------------------------|
|-------------------|---------------------|----------------------|------------------------------------|--------------------------|



- ☐ Increased Safety Significance
- ☐ Increased NRC Inspection Efforts
- ☐ Increased NRC/Licensee Management Involvement
- ☐ Increased Regulatory Actions



National Summary of Plant Performance

Status at End of CY 2004

| | |
|-------------------------------------------|------|
| Licensee Response | 78 |
| Regulatory Response | 21 |
| Degraded Cornerstone | 0 |
| Multiple/Repetitive Degraded Cornerstones | 3 |
| Unacceptable | 0 |
| <hr/> | |
| TOTAL UNITS | 102* |

* Davis-Besse was in Shutdown with Enhanced Oversight in 2004



National Summary

☐ Performance Indicator Results (at end of 2004)

| | |
|---------|------|
| Green: | 1834 |
| White: | 6 |
| Yellow: | 0 |
| Red: | 0 |

☐ Total Inspection Findings (2004)

| | |
|---------|-----|
| Green: | 778 |
| White: | 11 |
| Yellow: | 0 |
| Red: | 0 |



Salem Inspection Activities

(January 1 – December 31, 2004)

- ☐ 7290 Hours of Inspection Related Activities
- ☐ Baseline Inspections and Performance Indicator Verifications Completed
- ☐ 2 Full-Time Resident Inspectors at Salem Station
- ☐ 18 Regional Specialist Inspection Activities
- ☐ 2 Team Inspections



Salem 1 Assessment Inputs

- ☐ Inspection Findings
 - 16 Findings of Very Low Safety Significance (Green)
 - 1 Finding of Low to Moderate Safety Significance (White)
 - Individual Findings Evaluated for Common Themes (Cross-Cutting Issues)
- ☐ Performance Indicators
 - All Indicators Green



Salem 2 Assessment Inputs

- ☐ Inspection Findings
 - 14 Findings of Very Low Safety Significance (Green)
 - Individual Findings Evaluated for Common Themes (Cross-Cutting Issues)
- ☐ Performance Indicators
 - All Indicators Green



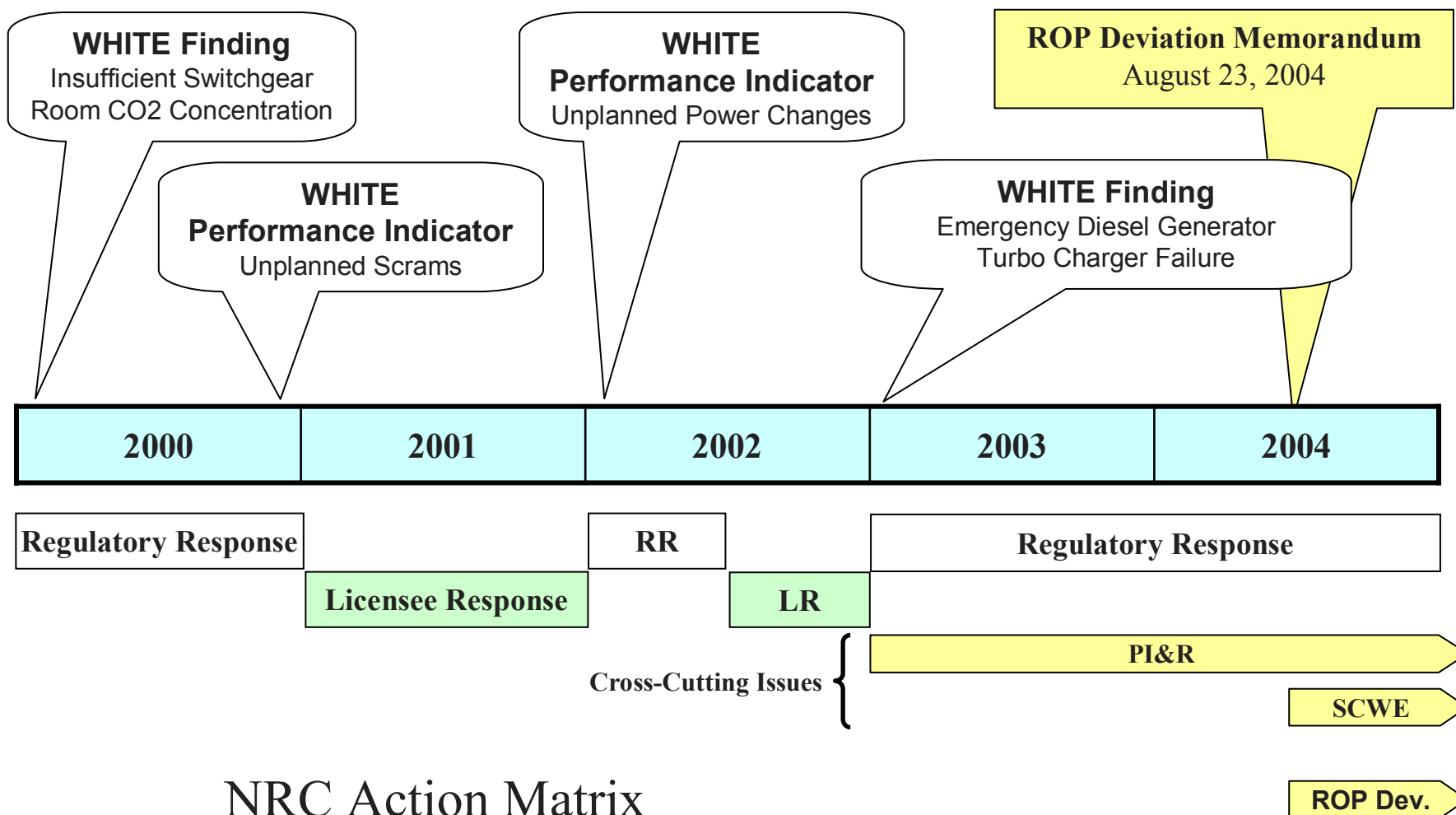
Salem Assessment Summary

January 1 – December 31, 2004

- ☐ Overall, both units operated in a manner that preserved public health and safety
- ☐ At the end of CY 2004
 - Salem Unit 1 – Regulatory Response
 - One inspection finding classified as having low to moderate safety significance (White)
 - Salem Unit 2 – Licensee Response
- ☐ Substantive cross-cutting issues
 - Problem identification and resolution (PI&R)
 - Safety conscious work environment (SCWE)



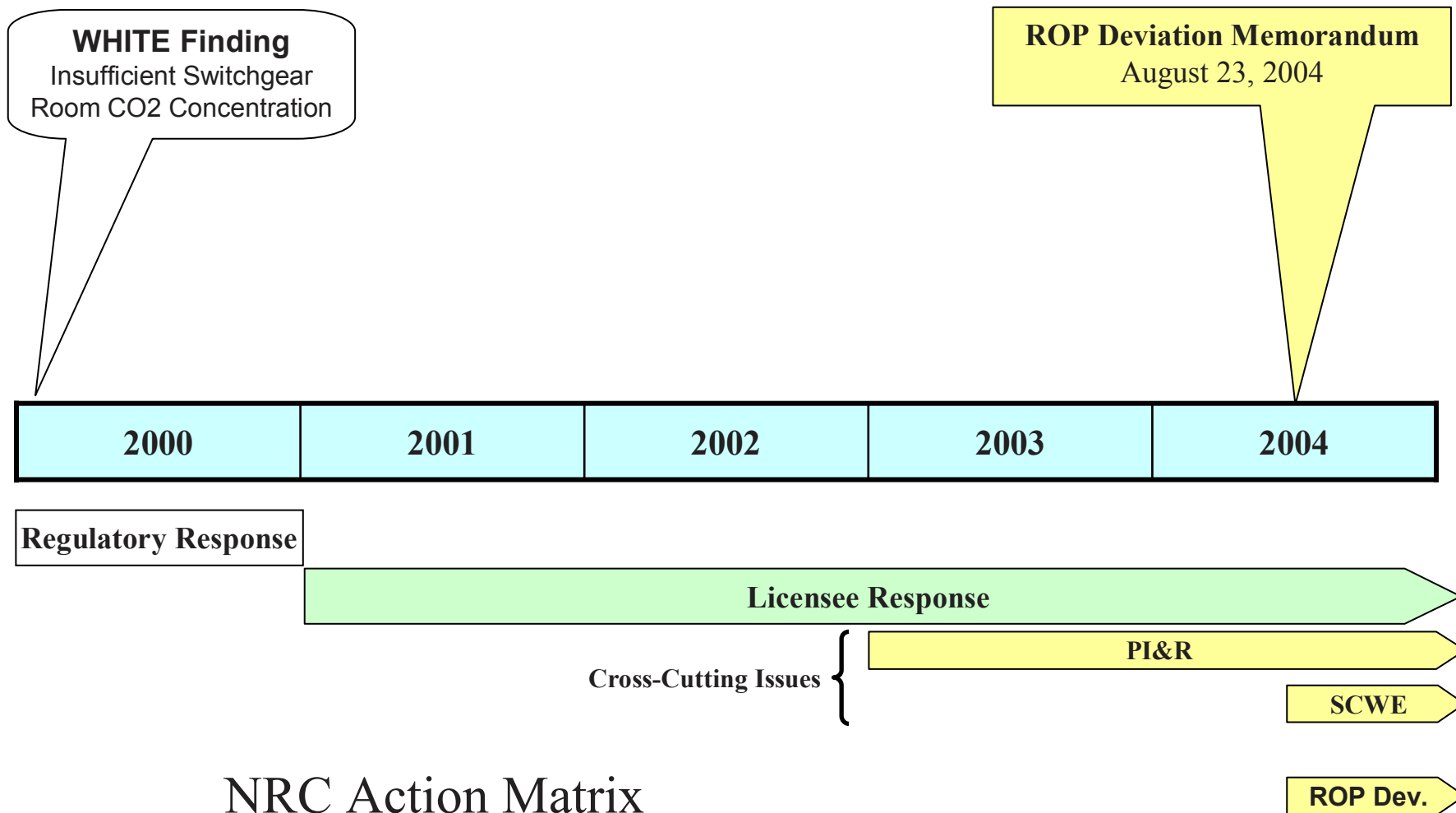
Salem 1 Performance



NRC Action Matrix
and Oversight



Salem 2 Performance



NRC Action Matrix
and Oversight



Hope Creek Inspection Activities



(January 1 – December 31, 2004)

- ☐ 8088 Hours of Inspection Related Activities
- ☐ Baseline Inspections and Performance Indicator Verifications Completed
- ☐ 2 Full-Time Resident Inspectors
- ☐ 14 Regional Specialist Inspection Activities
- ☐ 4 Team Inspections



Hope Creek Assessment Inputs



☐ Inspection Findings

- 24 Findings of Very Low Safety Significance (Green)
- 2 Findings of Low to Moderate Safety Significance (White)
- Individual Findings Evaluated for Common Themes (Cross-Cutting Issues)

☐ Performance Indicators

- All Indicators Green



Hope Creek Assessment Summary

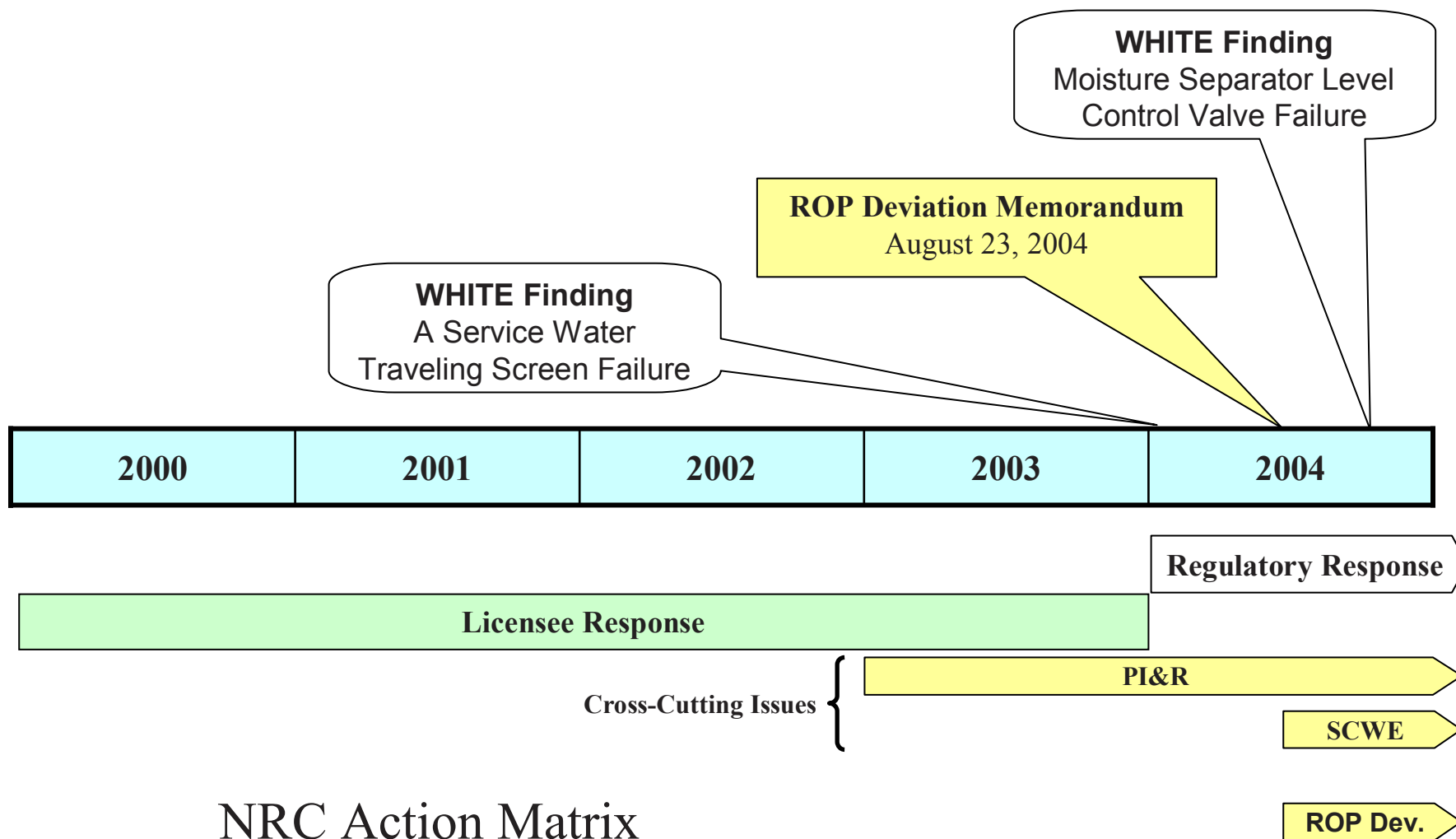


January 1 – December 31, 2004

- ☐ Overall, Hope Creek operated in a manner that preserved public health and safety
- ☐ At the end of CY 2004
 - Hope Creek – Regulatory Response
 - Two inspection findings classified as having low to moderate safety significance (White)
- ☐ Substantive cross-cutting issues
 - Problem identification and resolution (PI&R)
 - Safety conscious work environment (SCWE)



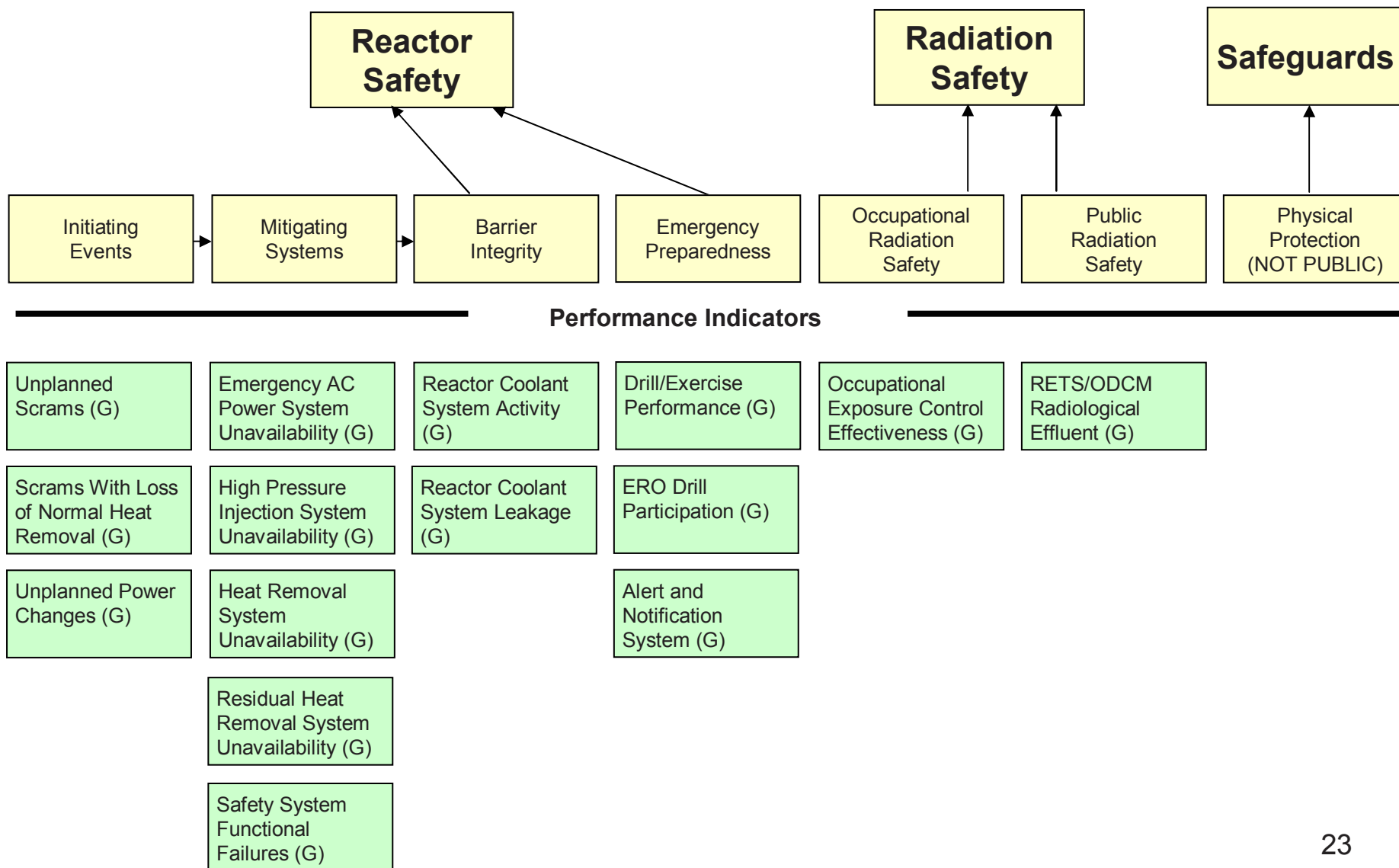
Hope Creek Performance



NRC Action Matrix
and Oversight

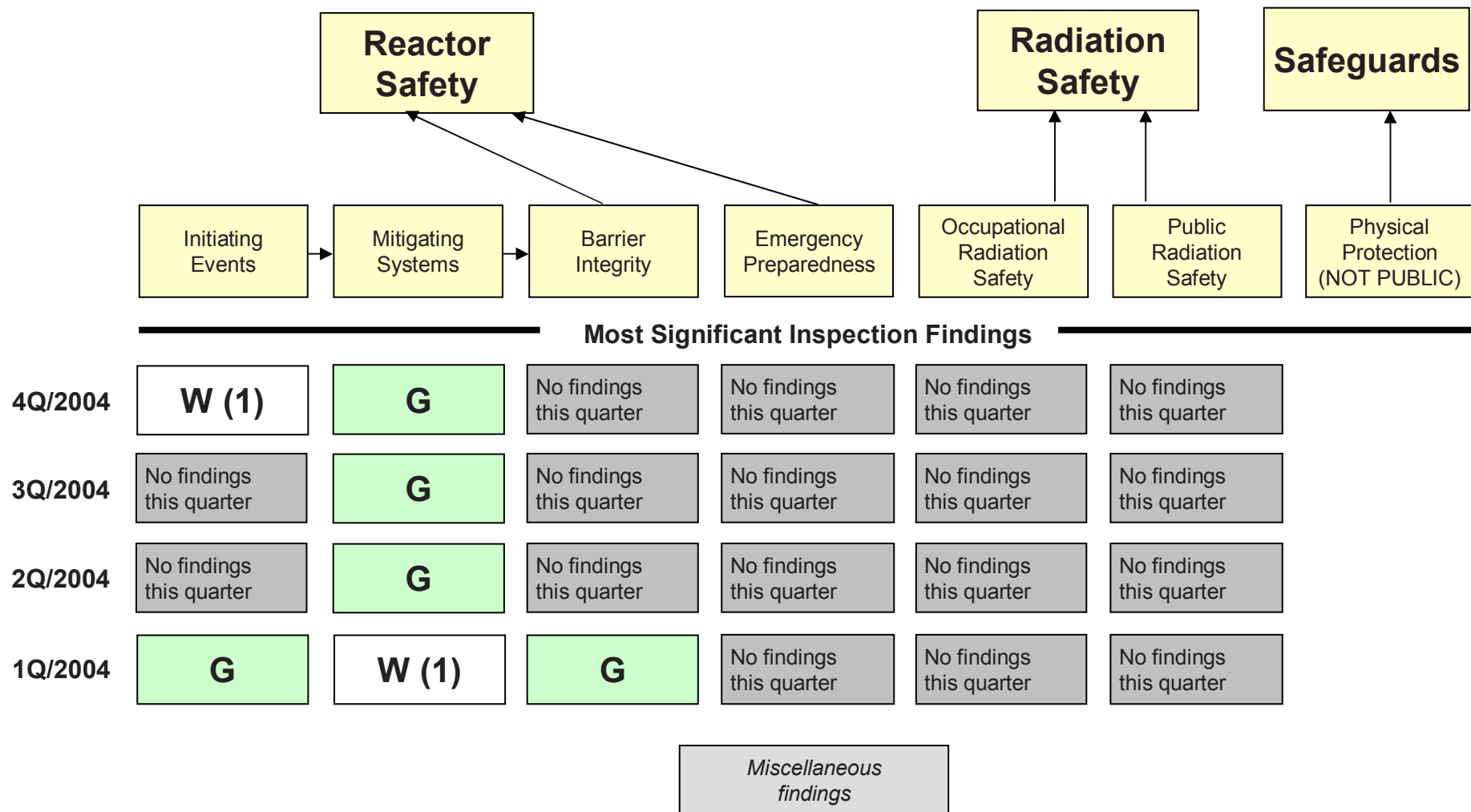


Hope Creek Performance Indicators





Hope Creek Inspection Findings





Cross-Cutting Issues

- ❑ Problem Identification and Resolution (PI&R)
 - PI&R cross-cutting issue continued throughout 2004 at Salem and Hope Creek based on a continuation of inspection findings and documented shortcomings within the PI&R area
 - 27 (14 Salem and 13 Hope Creek) inspection findings attributable, at least in part, to weaknesses in problem identification, problem evaluation and effectiveness of corrective actions
 - Fifth consecutive assessment with substantial cross-cutting issue in PI&R



Cross-Cutting Issues

- ❑ Safety Conscious Work Environment (SCWE)
 - Established during the 2004 mid-cycle performance assessment based on the results of the NRC's review of the work environment at Salem and Hope Creek.
 - PSEG has taken significant steps to evaluate the station's work environment and initiated actions to begin addressing deep-seated causes.
 - It is too early to effectively assess whether or not the work environment at the station is significantly improving.
 - The SCWE cross-cutting issue will continue.



ROP Deviation

- ❑ On August 23, 2004 the NRC Executive Director for Operations approved a deviation from the Action Matrix for Salem and Hope Creek
- ❑ Result of the substantive cross-cutting issue in SCWE and the longstanding cross-cutting issue in PI&R
- ❑ Authorizes a greater level of oversight for the Salem and Hope Creek stations than would typically be called for by the Regulatory Response Column of the Action Matrix including:
 - More frequent and an elevated level of NRC management involvement in meetings, site visits, and correspondence
 - Established an internal NRC coordination team
 - Assist Region I staff in review and evaluation of PSEG efforts
 - Regional and headquarters experts in reactor oversight, SCWE and related performance attributes
 - Review of PSEG's improvement plans with respect to SCWE and related performance attributes
 - Enhanced baseline inspections, as necessary, to verify the effectiveness of PSEG improvement
- ❑ The heightened oversight will continue until PSEG has concluded that substantial, sustainable progress has been made; and the NRC has completed a review, the results of which confirm PSEG's assessment results.



Ways for the Public To Become Informed & Involved in the Regulatory Process



- ☐ Participate in NRC Public Meetings
- ☐ Sign up to be on the NRC mailing list
- ☐ Visit the NRC website on a regular basis
- ☐ Publicly comment on proposed licensing actions or file a Petition for Rulemaking
- ☐ Implement 10 CFR 2.206 petition process
- ☐ Contact the NRC via E-mail, mail or phone to address questions or areas of concern
- ☐ Participate in open NRC/industry symposiums
- ☐ Request information through the Freedom of Information Act (FOIA)



Reference Sources

- ❑ Reactor Oversight Process
 - <http://www.nrc.gov/NRR/OVERSIGHT/ASSESS/index.html>
- ❑ Public Electronic Reading Room
 - <http://www.nrc.gov/reading-rm.html>
- ❑ Public Document Room 1-800-397-4209 (Toll Free)
Public Comment & Involvement in Rulemaking
 - <http://ruleforum.llnl.gov>



Contacting the NRC

- ☐ Report an emergency
 - (301) 816-5100 (call collect)
- ☐ Report a safety concern
 - (800) 695-7403
 - Allegation@nrc.gov
- ☐ General information or questions
 - www.nrc.gov/what-we-do/public-affairs.html
 - Diane Screnci, Senior Public Affairs Officer
 - (610) 337-5330
 - Neil Sheehan, Public Affairs Officer
 - (610) 337-5331
- ☐ Main Contact
 - Eugene Cobey, Branch Chief, Division of Reactor Projects
 - (610) 337-5171
 - Email at: EWC@nrc.gov



PSEG Response/Remarks

- ❑ PSEG response to annual assessment and remarks regarding their actions to improve performance in the following areas:
 - Safety conscious work environment;
 - Problem identification and resolution;
 - Procedure adherence and other elements of human performance; and
 - Quality of engineering products particularly as they relate to evaluation of degraded equipment and associated operational decision making.



NRC Closing Remarks





BREAK

- ❑ Following a 10 minute break, the NRC will take questions/comments from the public.



Public Questions/Comments

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